IN THE CLAIMS

Please amend claims 1, 3-7, 9-13 and 15-18 as indicated below.

This listing of claims will replace all prior versions, and listings, of the claims in the Application.

Listing of Claims:

Claim 1 (currently amended) A method for activating a volume group, in a network system of a plurality of nodes, without a quorum of disks in said volume group being active comprising the steps of:

receiving from a first node by a second node sending a first notification of updating meta data associated with a plurality of disks in a first volume group shared by [[a]] said first node and [[a]] said second node;

receiving from said first node a second notification by said second node indicating that said meta data associated with said plurality of disks in said first volume group has been updated, wherein said second notification comprises a data identifier; and

activating by said second node said first volume group by identifying a single disk with valid meta data out of said plurality of disks in said first volume group based on said data identifier, wherein said data identifier identifies one or more disks that are active.

Claim 2 (original) The method as recited in claim 1, wherein said step of activating said first volume group shared by said first and said second node occurs after said first node becomes inoperative, wherein said first node becomes inoperative after sending said second notification.

Claim 3 (currently amended) The method as recited in claim 1, wherein said meta data is system configuration information used to identify said first volume group.

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Claim 4 (currently amended) The method as recited in claim 1, wherein said data identifier [[is]] comprises a first time stamp, wherein said activating step comprises the following steps:

searching by said second node a plurality of time stamps in said meta data associated with said plurality of disks in said first volume group, wherein said meta data is generated by a logical volume manager, wherein each of said plurality of time stamps in said meta data is associated with an identifier in said meta data that identifies one of said plurality of disks in said first volume group;

matching said first time stamp with a second time stamp in said plurality of time stamps in said meta data associated with said plurality of disks in said first volume group; and

in response to said matching, identifying said single disk by said second node by matching said first time stamp with said second time stamp associated with an identifier that identifies said single disk.

Claim 5 (currently amended) The method as recited in claim 1, wherein said data identifier [[is]] comprises a list of one or more active disks in said first volume group, wherein said activating step comprises the following steps:

reading said list of one or more active disks in said first volume group by said second node, wherein said list includes a listing of said single disk; and

in response to said reading, identifying said single disk listed in said list of one or more active disks in said first volume group. an indication of one or more of said plurality of disks in said first volume group that comprise valid data.

Claim 6 (currently amended) The method as recited in claim 1 further comprising the steps of:

determining by said first node that an allocation of disks in said first volume group needs to be changed;

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changing which disks are part of said first volume group by said first node;
and

in response to changing which disks are part of said first volume group,
updating by said first node said meta data associated with said plurality of disks in
said first volume group. , wherein said data associated with said plurality of disks in
said first volume group is updated if the allocation of said first volume group shared
by said first and said second node needs to be changed.

Claim 7 (currently amended) A computer program product having computer readable
memory having computer program logic recorded thereon for activating a volume
group, in a network system of a plurality of nodes, without a quorum of disks in said
volume group being active, comprising:

programming operable for receiving from a first node by a second node
sending a first notification of updating meta data associated with a plurality of disks
in a first volume group shared by [[a]] said first node and [[a]] said second node;

programming operable for receiving from said first node a second notification
by said second node indicating that said meta data associated with said plurality of
disks in said first volume group has been updated, wherein said second notification
comprises a data identifier; and

programming operable for activating by said second node said first volume
group by identifying a single disk with valid meta data out of said plurality of disks in
said first volume group based on said data identifier, wherein said data identifier
identifies one or more disks that are active.

Claim 8 (original) The computer program product as recited in claim 7, wherein said
programming step of activating said first volume group shared by said first and said
second node occurs after said first node becomes inoperative, wherein said first node
becomes inoperative after sending said second notification.

Claim 9 (currently amended) The computer program product as recited in claim 7, wherein said <u>meta</u> data is system configuration information <u>used to identify said first volume group</u>.

Claim 10 (currently amended) The computer program product as recited in claim 7, wherein said data identifier [[is]] <u>comprises</u> a <u>first</u> time stamp<u>, wherein said activating programming step comprises the following programming steps:</u>

<u>searching a plurality of time stamps in said meta data associated with said plurality of disks in said first volume group, wherein said meta data is generated by a logical volume manager, wherein each of said plurality of time stamps in said meta data is associated with an identifier in said meta data that identifies one of said plurality of disks in said first volume group;</u>

<u>matching said first time stamp with a second time stamp in said plurality of time stamps in said meta data associated with said plurality of disks in said first volume group; and</u>

<u>in response to said matching, identifying said single disk by matching said first time stamp with said second time stamp associated with an identifier that identifies said single disk.</u>

Claim 11 (currently amended) The computer program product as recited in claim 7, wherein said data identifier [[is]] <u>comprises a list of one or more active disks in said first volume group, wherein said activating programming step comprises the following programming steps:</u>

<u>reading said list of one or more active disks in said first volume group, wherein said list includes a listing of said single disk; and</u>

<u>in response to said reading, identifying said single disk listed in said list of one or more active disks in said first volume group.</u> an indication of one or more of said plurality of disks in said first volume group that comprise valid data.

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Claim 12 (currently amended) The computer program product as recited in claim 7 further comprising:

programming operable for determining that an allocation of disks in said first volume group needs to be changed;

changing which disks are part of said first volume group by said first node; and

in response to changing which disks are part of said first volume group, updating said meta data associated with said plurality of disks in said first volume group. ~~, wherein said data associated with said plurality of disks in said first volume group is updated if the allocation of said first volume group shared by said first and said second node needs to be changed.~~

Claim 13 (currently amended) A system, comprising:

a first node; and

a second node coupled to said first node, wherein said second node is configured to take over the functions of said first node if said first node becomes inoperative, wherein said second node comprises:

a processor;

a memory unit operable for storing a computer program operable for activating a volume group without a quorum of disks in said volume group being active;

an input mechanism;

an output mechanism; and

a bus system coupling the processor to the memory unit, input mechanism, and output mechanism, wherein the computer program is operable for performing the following programming steps:

receiving a first notification of updating meta data associated with a plurality of disks in a first volume group shared by said first node and said second node;

receiving a second notification indicating that said <u>meta</u> data associated with said plurality of disks in said first volume group has been updated, wherein said second notification comprises a data identifier; and

activating said first volume group by identifying a single disk with valid <u>meta</u> data out of said plurality of disks in said first volume group based on said data identifier<u>, wherein said data identifier identifies one or more disks that are active</u>.

Claim 14 (original) The system as recited in claim 13, wherein said programming step of activating said first volume group shared by said first and said second node occurs after said first node becomes inoperative, wherein said first node becomes inoperative after sending said second notification.

Claim 15 (currently amended) The system as recited in claim 13, wherein said <u>meta</u> data is system configuration information <u>used to identify said first volume group</u>.

Claim 16 (currently amended) The system as recited in claim 13, wherein said data identifier [[is]] <u>comprises</u> a <u>first</u> time stamp<u>, wherein said activating programming step comprises the following programming steps:</u>

<u>searching a plurality of time stamps in said meta data associated with said plurality of disks in said first volume group, wherein said meta data is generated by a logical volume manager, wherein each of said plurality of time stamps in said meta data is associated with an identifier in said meta data that identifies one of said plurality of disks in said first volume group;</u>

<u>matching said first time stamp with a second time stamp in said plurality of time stamps in said meta data associated with said plurality of disks in said first volume group; and</u>

<u>in response to said matching, identifying said single disk by matching said first time stamp with said second time stamp associated with an identifier that identifies said single disk.</u>

Claim 17 (currently amended) The system as recited in claim 13, wherein said data identifier [[is]] comprises a list of one or more active disks in said first volume group, wherein said activating programming step comprises the following programming steps:

reading said list of one or more active disks in said first volume group, wherein said list includes a listing of said single disk; and

in response to said reading, identifying said single disk listed in said list of one or more active disks in said first volume group. an indication of one or more of said plurality of disks in said first volume group that comprise valid data.

Claim 18 (currently amended) The system as recited in claim 13, wherein said meta data associated with said plurality of disks in said first volume group is updated if the allocation of said first volume group shared by said first and said second node needs to be changed.